~~Claims~~

WHAT IS CLAIMED IS:

1. - 21. (canceled)

22. (new) A method for machining workpieces by combining a first machining tool with at least one second machining tool, wherein at least one of the first and second machining tools employs laser radiation, the method comprising the steps of:

operating the first machining tool with a first pulse modulation and the at least one second machining tool with a second pulse modulation; and

synchronizing the first and second pulse modulations of the first machining tool and the at least one second machining tool.

23. (new) The method according to claim 22, wherein in the step of synchronizing same pulse frequencies are used for the first and second pulse modulations, wherein the first and second pulse modulations are in a fixed or variably controlled phase relationship relative to one another.

24. (new) The method according to claim 22, wherein in the step of synchronizing pulse frequencies are used that are an integral multiple relative to one another, wherein the first and second pulse modulations are in a fixed or variably controlled phase relationship relative to one another.

25. (new) The method according to claim 22, wherein in the step of synchronizing one of the first and at least one second machining tools is used as a master and the other or others of the first and at least one second machining tools are slaves, wherein pulse control signals of the master are used as a master signal for synchronizing the first and second pulse modulations.

26. (new) The method according to claim 23, wherein the phase relationship is controlled as a function of one or several process parameters and/or for affecting one or several process parameters and/or as a function of sensor signals.

27. (new) The method according to claim 24, wherein the phase relationship is controlled as a function of one or several process parameters and/or for affecting one or several process parameters and/or as a function of sensor signals.

28. (new) The method according to claim 22, wherein the step of synchronizing is carried out by in-phase synchronization.

29. (new) The method according to claim 22, wherein the step of synchronizing is carried out by antiphase synchronization.

30. (new) The method according to claim 25, wherein a slave pulse in response to the master pulse is generated at the beginning or at the end of the master pulse, or vice versa.

31. (new) The method according to claim 22, further comprising the step of generating individual pulses or pulse packages for the first and second pulse modulations.

32. (new) The method according to claim 25, wherein the master is a machining tool that is optionally not externally controllable.

33. (new) The method according to one claim 25, wherein the master is a machining tool that is internally process-controlled with variable pulse frequency.

34. (new) The method according to claim 22, wherein the at least one second machining tool employs at least one of laser radiation, electric arc radiation, plasma radiation, an energy source, a pulse source, and a particle source.

35. (new) The method according to claim 22, wherein the first and second machining tools are selected from the group consisting of separating tools, material removing tools, joining tools, coating tools, building tools, surface treatment tools, and surface finishing tools, wherein the first and at least one second machining tools are configured such that active areas during machining on or within the workpiece overlap or adjoin one another immediately during the machining process.

36. (new) The method according to claim 35, wherein the first and second machining tools perform machining processes selected from the group consisting of cutting, drilling, material removing, perforating, scoring, engraving, structuring, cleaning, welding, soldering, bonding, coating, generating, selective sintering, rapid prototyping, hardening, refining, alloying, dispersing, polishing, applying lettering, shaping, and bending.

37. (new) A device for hybrid processing of materials by a first machining tool in combination with at least one second machining tool, wherein the first machining tool

employs laser radiation, the device comprising:

a first pulse generator for pulse modulation of the laser radiation of the first machining tool;

a second pulse generator for pulse modulation of the at least one second machining tool;

a synchronizer for synchronous modulation of the first and the at least one second machining tool.

38. (new) The device according to claim 37, further comprising a controller, wherein the first and second pulse generators and the synchronizer are designed to modulate the laser radiation and the at least one additional machining tool with same pulse frequencies, wherein the pulse modulations of the first and second pulse generators are in a fixed or variable phase relationship that is variably controlled by the controller.

39. (new) The device according to claim 37, further comprising a controller, wherein the first and second pulse generators and the synchronizer are designed to modulate the laser radiation and the at least one additional machining tool with pulse frequencies that are an integral multiple relative to one another, wherein the pulse modulations of the first and second pulse generators are in a fixed or variable phase relationship that is variably controlled by the controller.

40. (new) The device according to claim 37, further comprising at least one source for processing pulse control signals generated by the first pulse generator as a master signal for triggering a synchronous control of the modulation of pulse control signals of the second pulse generator in slave operation.

41. (new) The device according to claim 37, further comprising at least one source for processing pulse control signals generated by the second pulse generator as a master signal for triggering a synchronous control of the modulation of pulse control signals of the first pulse generator in slave operation.

42. (new) The device according to claim 37, further comprising input devices for process parameters and sensors for process results in the form of sensor signals, wherein the input devices and the sensors are configured to control a phase relationship of the

pulse modulations as a function of the process parameters and/or for affecting one or several of the process parameters and/or as a function of the sensors signals.

43. (new) The device according to claim 37, wherein the synchronizer provides in-phase synchronization.

44. (new) The device according to claim 37, wherein the synchronizer provides antiphase synchronization.

45. (new) The device according to claim 37, wherein the synchronizer generates a slave pulse at the beginning or at the end of the master pulse.

46. (new) The device according to claim 37, wherein the first and second pulse generators generate individual pulses and/or pulse packages.

47. (new) The device according to claim 37, wherein the at least one second machining tool employs at least one of laser radiation, electric arc radiation, plasma radiation, an energy source, a pulse source, and a particle source.